

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054266 A2

(51) International Patent Classification⁷: C07H 17/00

(21) International Application Number:
PCT/GB2004/005018

(22) International Filing Date:
29 November 2004 (29.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0327720.9 28 November 2003 (28.11.2003) GB

(71) Applicants (for all designated States except US): **BIOTICA TECHNOLOGY LIMITED** [GB/GB]; Chesterford Research Park, Little Chesterford, Nr Saffron Walden Essex CB10 1XL (GB). **PFIZER INC.** [US/US]; 235 East 42nd Street, New York, NY 10017 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **GAISSER, Sabine** [GB/GB]; Biotica Technology Limited, Chesterford Research Park, Little Chesterford, Nr Saffron Walden Essex CB10 1XL (GB).

(74) Agents: **STUART, Ian et al.**; Mewburn Ellis LLP, York House, 23 Kingsway, London Greater London WC2B 6HP (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ERYTHROMYCINS AND PROCESS FOR THEIR PREPARATION

(57) Abstract: 14-membered macrolide compounds such as erythromycins are provided with functional groups at the 14- and/or 15-position by providing a 14-membered aglycone template and feeding it to a strain capable of hydroxylating it at the 14 and/or 15 position. The strain may be found by screening, selected from known strains (e.g. *Streptomyces eurythermus* DSM 40014) or produced by genetically engineering a strain to express a cytochrome P450 enzyme.



WO 2005/054266 A2